

THOMAS HODGKIN (1798-1866): MORBID ANATOMIST AND SOCIAL ACTIVIST

LOUIS ROSENFELD, PH.D.

Department of Pathology
New York University Medical Center
New York, New York

EPONYMIC FAME

THE term Hodgkin's disease was used originally by Dr. Samuel Wilks (1824-1911)¹ of Guy's Hospital, 33 years after Hodgkin's description of what seemed to be the same disease as some cases that Wilks was preparing for publication.^{2,3} At first Wilks was under the impression that his personal observations were original. When he came across Hodgkin's paper, he realized that he had rediscovered a disease that Hodgkin may have first described.

Hodgkin's paper was read on January 10 and 24, 1832 before the Medical and Chirurgical Society, and was published in its *Transactions*.⁴ He stated, with characteristic modesty, in the opening paragraph that he was merely directing special attention to findings that must have been observed by many morbid anatomists during the course of cadaveric inspection. He had no idea that in possibly four of his seven cases he was dealing with a peculiar and rare disease. Nor were all of Wilks' cases examples of Hodgkin's disease. This is not surprising, since Wilks also gave no microscopic descriptions. It is remarkable that a pathological disorder originally identified by gross appearances eventually came to be recognized by its histologic characteristics. When microscopic analysis of some of the preserved original tissue from three of Hodgkin's cases were finally made a century later,⁵ two were found to have Reed-Sternberg cells,⁶ the primary histologic characteristic established by modern pathological criteria.

Hodgkin was correct in believing that this disease must have been observed by others. After his paper was read, he received a note from a friend who quoted an excerpt from *De Viscerum structura*, published in 1666 by Marcello Malpighi (1628-1694), describing a diseased spleen and disseminated enlargement of lymph nodes in a young girl that resembled Hodgkin's cases. Hodgkin included the Latin excerpt as a footnote in his published report.

Hodgkin's paper was published without illustrations, although water color paintings of the morbid anatomy of the seventh case,⁷ borrowed for the oc-

casion, were displayed while the paper was being read. Hodgkin had come across this seventh case while examining the exceptional collection of pathological drawings made by his friend, Sir Robert Carswell (1793-1857), professor of morbid anatomy at University College Hospital in London. Hodgkin did not pursue this association between enlarged lymph nodes and spleen with a critical analysis, and published nothing more that might clarify or amplify it.

Hodgkin expressed regret that most patients did not seek admission to the hospital until the disease had reached an advanced and hopeless stage. "A pathological paper may perhaps be thought of little value if unaccompanied by suggestions designed to assist in the treatment, either curative or palliative; on this head however I must confess that I have nothing to offer."⁸ Hodgkin's account is all the more remarkable because he suggested this unusual relationship between enlarged spleen and lymph nodes entirely on the basis of gross anatomical appearance at a time when the microscopic examination of tissues was virtually unknown and little was known about the spleen or lymph nodes, and there was no reason to suspect any relationship.

OTHER MEDICAL CONTRIBUTIONS

Less well known are Hodgkin's other medical activities, and his participation in the social reform and humanitarian movements of his time, as well as his contributions to geographic explorations, anthropology, ethnology and even foreign affairs. He established the first pathological museum at Guy's Hospital and was co-author of one of the earliest reports of observations using the new achromatic microscope developed by Joseph Jackson Lister (1786-1869).⁹ In this paper Hodgkin and Lister for the first time described human red cells as biconcave discs. It was the best description of red blood cells up to that time. J.J. Lister was the father of Joseph Lister (1827-1912), who introduced antiseptics to surgery.

Thomas Hodgkin is not generally recognized for his description of aortic insufficiency five years before Dominic John Corrigan (1802-1880) published his famous paper on the same subject. In 1827 Hodgkin described the postmortem appearance of aortic regurgitation, or, as he put it, "retroversion of the valves of the aorta." A continuation of his paper was read to the Hunterian Society two years later. Once again, Hodgkin disclaimed any originality for his observation, as he begins in Quaker style: "My dear Friend, Thou wilt probably recollect having pointed out to me, a few months ago, a particular state of the valves of the aorta, which, by admitting of their falling back towards the ventricle, unfits them for the performance of their

function.” “To avoid circumlocution, and in defect of a better name, I shall designate by the term retroversion of the valves that diseased state which allows of their dropping in towards the ventricle, instead of effectually closing the vessel against a reflux of the blood.”¹⁰

Quite possibly, the form in which his findings were published—two parts of a letter, two years after the initial presentation—minimized their impact on the medical community. When Wilks discovered this paper of Hodgkin’s, he proposed in 1871¹¹ and again in 1878¹² to credit Hodgkin with priority. But by now Corrigan’s association with aortic regurgitation had been well established.

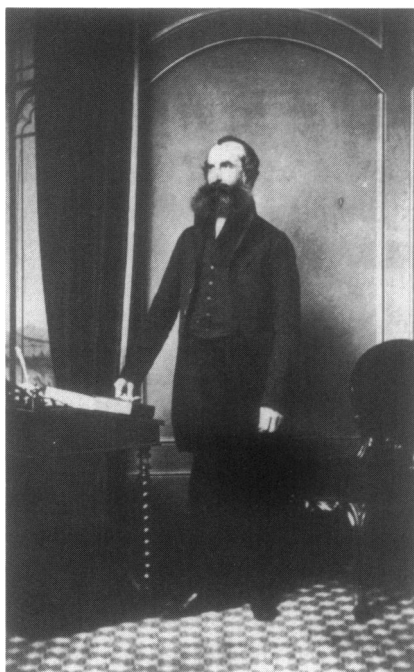
EARLY YEARS, EDUCATION, MORBID ANATOMIST

Thomas Hodgkin was born at Pentonville, a small country village just north of London, on August 17, 1798. Prematurely born at seven months, he was a delicate child and never had a vigorous constitution. Although never robust, and frequently troubled throughout his life by some disorder of the colon, Thomas Hodgkin grew into a man of unending activity and tireless energy. The adult Hodgkin was short, lean and dark-complexioned. He stood straight, very alert with bright eyes and a restless spirit full of purpose and action when he spoke and walked.

Hodgkin’s parents were strictly observant Quakers, and their religious training and teaching had an impact on him. He was faithful to his upbringing and remained through life a serious member of the Society of Friends while remarkably free from sectarian narrowness. As a dutiful Quaker, he accepted, though with considerable protest, the decision of the Society of Friends opposing his marriage with a first cousin.

As a Quaker, Hodgkin was barred from education at Oxford or Cambridge, as were all religious nonconformists. Educated privately, he acquired a sound knowledge of the classics and natural science, and was apparently a natural linguist. He had command not only of French, Latin and Greek, but also Italian and German, with bits of other languages picked up during his travels. Years later Hodgkin was active in the founding of the nonsectarian University of London, the first University in England to grant degrees to Dissenters (Catholics, Quakers, Jews, Presbyterians and other non-Anglicans), and was a member of the university’s first senate.

It is often written about Hodgkin that he always wore the strict black clothes that had become the uniform of the Quaker sect. This is probably true only of his earlier days as curator, when he was also clean-shaven. The photograph showing him with a beard also shows him wearing the conven-



Thomas Hodgkin toward the later years of his life. Courtesy of the Library Committee of the Religious Society of Friends, London, England.

tional clothes of the day. However, Hodgkin always adhered to the Quaker style of speech, and it was “thy,” “thou” and “thine,” rather than “you” and “yours.”

His first interest in a professional career was in pharmaceutical chemistry. After two years as an apprentice, he decided to pursue a medical career, not only for its own sake, but because he regarded medicine as the best passport for a traveler in a foreign land and among all races of man.¹³ He entered Guy’s Hospital and Medical School as a physician’s pupil on September 30, 1819. In October of 1820, the year in which George III died, Hodgkin entered Edinburgh University as a medical student, and was enrolled for two sessions, 1820-21 and 1822-23.

During the university vacation and the school year from October 1821 to September 1822 Hodgkin traveled on the Continent for additional experience and instruction. In Paris he learned the new art of auscultation first-hand from René-Théophile-Hyacinthe Laennec (1781-1826), who compiled a list of some 300 students and foreign visitors who had attended his ward rounds and lectures. Some, like Thomas Hodgkin, were mentioned by name in the

preface to the second edition (1826) of Laennec's treatise on auscultation as having been particularly noteworthy in following his teachings and in the study of the stethoscope.

On his return to England from Paris, Hodgkin read a paper to the Guy's Physical Society on Saturday October 5, 1822 on the use of the stethoscope, which he had brought back with him. Hodgkin's paper is credited with introduction of the stethoscope to Guy's Hospital, although there is no direct evidence of this, and this instrument was known in London as early as the end of 1819.¹⁴ Unfortunately, Hodgkin's presentation to the Physical Society is missing from the records of the Society.

Hodgkin graduated at Edinburgh in August 1823 with a *Dissertatio Physiologica Inauguralis* of 78 pages entitled *De Absorbendi Functione*, which contained some original observations on the mechanisms of the absorbing function of blood and lymph. He then visited some friends and relatives in Scotland and England. In the fall of 1823 he accepted a position as the personal "traveling" physician to Abraham Montefiore, younger brother of Moses Montefiore, the noted Jewish philanthropist, but this relationship did not work out and was terminated before the end of the year.¹⁵

Hodgkin spent much of 1824 in Italy and Geneva, and before the end of the year he was back in Paris enjoying the intellectual and social life of the city. He returned to London in the middle of 1825 to begin the private practice of medicine. While this was developing, he became associated with the clinical courses and museum at his alma mater, Guy's Hospital. His interest and skill in morbid anatomy attracted the attention of Sir Astley Cooper, the famous surgeon. In the fall of 1825, at age 27, Thomas Hodgkin was invited to return to Guy's and was appointed the first Demonstrator (Lecturer) in Morbid Anatomy and Curator of the Museum of the new Guy's Hospital Medical School, which began its classes in October of 1825.

In addition to his work as morbid anatomist, Hodgkin gave what was very probably the first separate course of lectures in morbid anatomy in Great Britain. These were later published in two volumes as "Lectures on the Morbid Anatomy of the Serous and Mucous Membranes." Previously, in England, this subject had been included in lectures on special anatomy, surgery and medicine.

"We can only become properly initiated into our profession by personal acquaintance with disease, founded on our own patient investigation at the bed-side of the sick, and by a diligent examination of the effects of disease, as brought to light by cadaveric inspection. The practice of examining the

dead, for the purpose of ascertaining the seat and effect of disease, is absolutely necessary to complete those ideas which it is impossible for the best verbal descriptions perfectly to convey: and it is also necessary, as the means of detecting that which yet remains to be either wholly discovered or more fully elucidated.”¹⁶

REFORM IN EDUCATION; SATIRE IN CARICATURE

Not long after beginning his association with Guy's Hospital, he risked the displeasure of his more senior colleagues by proposing a radical change in medical education. Hodgkin suggested a sharp reduction in the period of apprenticeship with an apothecary. This was a break with the established practice of the past, when “five, six, or even seven years, might not be an unreasonable time to be spent in instructing the apprentice, by the purely routine and practical method, in the mystery of preparing the numerous and complicated farragoes, which it was the business of the Apothecary to administer, under the direction of the Physician. The case is, at present, widely different: the Apothecaries' shops are encumbered with fewer articles—most of these are generally supplied, ready prepared by the wholesale Druggist, and a very few months, at the utmost, would suffice for the acquisition of the art of combining them in extemporaneous prescription.”¹⁷

The newly available time, he believed, should be spent in the pursuit of a liberal preliminary education or devoted to other professional knowledge. Hodgkin wanted more clinical medical instruction at the bedside and more study of morbid anatomy, physiology and legal medicine. He also cautioned against allowing newly-qualified students to enter practice too soon. This, he said, “is extremely likely to induce a superficial manner of viewing disease, and a routine method of treatment, which, when formed into habits, will, more or less, continue to exert an injurious influence, in spite of more extended knowledge.”¹⁸

Hodgkin's most interesting suggestion concerned the introduction during the clinical years of clerks into the medical wards to assist the physicians, comparable to the dressers who for so long had assisted the surgeons in operations and accompanied them in the surgical wards carrying the boxes with the applications for wounds, i.e., plasters, bandages and dressings.

Hodgkin stressed the need for greater attention to the study of morbid anatomy because it presents the opportunity for “comparing symptoms with structural derangement.” He suggested that the indifference to pathology was the result of the student's premature introduction to medical practice. Being “imperfectly acquainted with the healthy structure,” the student “must

necessarily be incompetent to judge of the endless variations induced by disease.''¹⁹

Near the end of 1828 he was a key witness for the plaintiff in a sensational case of medical libel brought against Thomas Wakley, editor of *The Lancet*. Subsequently, Hodgkin was portrayed, along with others of Guy's Hospital, in one of the caricatures satirizing the trial.

CONFLICT AND CONTROVERSY; REJECTION AND RESIGNATION

Thomas Hodgkin held his posts as Curator of the Museum and Lecturer on Morbid Anatomy until 1837 with great distinction. In September of that year there occurred the pivotal event of his career. His candidacy for promotion to assistant physician at Guy's Hospital was rejected.

The opposition to Hodgkin had to do with his membership in the Society of Friends (Quakers), his involvement with the new nonsectarian University of London whose medical school competed with Guy's, his lectures to working people on the means of preserving and promoting health and his own recent illness which suggested that he was in bad health.²⁰ And there were other reasons, including his limited medical practice, as well as his habit of undercharging his patients or charging nothing at all, especially the poor.²¹ His colleagues were very critical of this neglect of professional fees. Hodgkin, in keeping with his Quaker faith, did not hold back from criticizing his associates when he thought it was called for. There was also his refusal, the previous year, of the honor of Fellowship in the College of Physicians. He refused on conscientious grounds to accept a distinction which he believed was based on discrimination between the Fellows and the lower category of Licentiates.

In the final analysis, the rejection of Hodgkin's promotion is undoubtedly related to the financial interest of Benjamin Harrison, Jr., the treasurer (chief executive officer) of Guy's Hospital, in the Hudson's Bay Company's Indian fur trade. A direct confrontation was inevitable between the autocratic Harrison and the independent Quaker who felt compelled to speak out on behalf of the North American Indians whenever he learned of injustices committed against them by the European settlers and Company agents. Added to these sources of friction was the commonly held belief that the treasurer would have no officer of the hospital who drove about with a North American Indian.²²

Passed over for the promotion, Hodgkin's personal disappointment was too great for him to remain at Guy's. On the day after the election he resigned all his positions at the hospital.²³

For a brief period in the early 1840s Hodgkin was back in a hospital setting. In July 1842, five years after leaving Guy's, he was invited by St. Thomas's Hospital, across the street, to assist in a reorganization of their medical school, which had fallen on hard times through a series of internal quarrels followed by several resignations. His stay at St. Thomas's was short. Something also went wrong there, and in the following July his name and the names of some other lecturers were no longer listed in the school prospectus. Exactly what happened is not known, but very likely the internal dissensions at St. Thomas's had persisted, and Hodgkin, not one to avoid controversy, must have gotten involved.

How much he was hurt by his experiences at Guy's and St. Thomas's is apparent from a letter to a friend: "I have very recently been greatly annoyed by the singularly uncourteous & unhandsome conduct of the managers of the Medical School at St. Thomas's, which, during the last year, has absorbed a large portion of my time attention & labour. Miserable intrigues, of which I regret to say that some members of our profession were at the bottom, have been carried on so as to erase my name from the list of Lecturers without consulting me on the subject, or assigning a reason. . . . Thou knowest that the people of Guy's used me very ill, but those of St. Thomas's have been still more regardless of even the form of courtesy."'²⁴

SOCIAL REFORM AND OTHER NONMEDICAL INTERESTS

After he left St. Thomas's he ceased to be affiliated with any hospital. He continued to see patients, but his practice, not being large, gradually receded into the background. Hodgkin still wrote on medical subjects, but he was deprived of a source of anatomical specimens. His relatively secure financial status and lack of official duties now permitted him to give even more time and effort to general scientific subjects and nonmedical activities. These are remarkable for their variety.

Thomas Hodgkin's interest in helping uncivilized and oppressed peoples first developed at an early age as a child from the stories he heard and the reports he read of the efforts of the Society of Friends to civilize American Indians. As a Quaker, his social consciousness and concern for all oppressed and underprivileged peoples was expressed in his opposition to slavery and the slave trade and by his involvement in many humanitarian activities and philanthropic organizations. Hodgkin had a committed interest in the affairs of freed black slaves and educated Indians, and he even entertained them in his home. He joined with others in supporting the colonization of freed slaves in Africa—although this was opposed by the abolitionists—and was

active in the establishment of settlements in Sierra Leone and Liberia. When Great Britain and Liberia exchanged treaties of recognition, Hodgkin represented the newly independent country.²⁵

As one of the founders of the Aborigines' Protection Society, he spoke out strongly against the oppressive measures used by the colonists against the Indians of Canada and natives in other British settlements in South Africa and New Zealand. Hodgkin's sympathy for the Canadian Indians, for whom he advocated full rights of British citizenship,²⁶ brought him into conflict with some of his professional associates. As secretary of the Aborigines' Protection Society, his letters and petitions to colonial governors and foreign secretaries expressed the Society's concerns and fears of the threat of extinction faced by the natives of the territories being overrun by European settlers.

Hodgkin was chairman of committees that established standardized guidelines for explorers and travelers to collect information about the physical and social structure of distant communities. He was a founder of the Ethnology Society, and collected data on the cultures and anthropology of primitive peoples and races threatened with extinction. He also advocated the study of native African culture and the preservation of African languages. In 1851 Hodgkin became the first of the honorary secretaries of the Royal Geographical Society of London. In this capacity he responded to an inquiry in 1858 from the American black activist Martin Robison Delany (1812-1885) for advice on an African location for settlement of freed slaves. Hodgkin later introduced Delany to other Englishmen who supported colonization, and contributed funds to Delany's expedition of exploration in Africa.

PUBLIC HEALTH, CHARITY AND MEDICAL CARE FOR THE POOR

Hodgkin did not neglect the problems of the socially and economically disadvantaged closer to home. When it came to medical care for the working-class poor, public health, housing and sanitation, Hodgkin addressed these issues in pamphlets with the following titles: *Hints Relating to the Cholera in London: Addressed to the Public in General, but especially to those who possess influence in their Parishes and Districts. And A Letter to a Member of the Board of Health* (1832); *On the Mode of Selecting and Remunerating Medical Men for Professional Attendance on the Poor of a Parish or District* (1836); *A Letter Addressed to the Inhabitants of Bridge Street, Blackfriars, and its Vicinity, Respecting the Establishment of a Dispensary for Diseases of the Skin* (1844); *Cold, Hunger, and Want of Employment; with Suggestions for their Relief* (1847); and a letter to a newspaper on *Dwellings*

for the Poor (1866). He also issued a one-page sheet for the "Society for the Improvement of the Condition of Factory Children" [1832].

Hodgkin consistently maintained that the basic problems of the poor were not medical but socioeconomic, and that the most effective means to relieve their distress was to provide them with useful employment. He pointed out that the working class is a valuable national resource whose unemployed status is a financial loss to the community and the nation. Since money given as charity leaves nothing behind in exchange, Hodgkin was certain that greater benefits would result if charitable money were used to provide jobs for those able to work. Employment instead of charity would make the poor "the agents of their own deliverance," and obviate "that tendency to an abject, slothful disposition, which the receipt of ordinary alms is wont to produce, and which too often becomes the cause of permanent degradation."²⁷

A LOOK TO THE FUTURE

In four publications with a particularly modern relevance for our own times, he urged that the apothecary system of weights and measures be replaced by the metric system for the preparation and dispensing of medicines; he emphasized the importance of statistics in medicine; he severely criticized the practices of trade unions; and he denounced the evils of tobacco. Hodgkin's detestation of tobacco led him to active participation in the British Anti-Tobacco Society. He attributed the enfeebled, sickly condition and chronic indigestion of many of his patients to their use of tobacco, and he maintained that the British had degenerated physically because of the growing consumption of tobacco.²⁸ He said that "smoking tends to encroach on the freedom and comfort of others If the smoker kept the smoke to himself, this objection would be done away with; but the fact is, that for his own useless, if not culpable gratification, he inflicts the smoke of his tobacco and his smelling breath on all indiscriminately"²⁹

Hodgkin was also quite perceptive when it came to athletic activities. He recommended exercise, but not "the barbarous prize-fights which disgrace this country. Their demoralizing effect is by no means confined to the parties actually engaged in these combats: . . . Perhaps, in many instances, the greatest evil is the effect produced upon the spectators."³⁰

THE FINAL JOURNEY

Thomas Hodgkin was a friend, physician and frequent traveling companion of Sir Moses Montefiore, Bart. (1784-1885). On his second journey to the

Middle East with Sir Moses, taken to distribute relief to the Jewish population suffering from the effects of the previous year's drought, locusts and cholera, Hodgkin contracted dysentery during a cholera epidemic and died on April 4, 1866. He was buried in a small Protestant cemetery in Jaffa which is just south of Tel-Aviv and is now continuous with it. The grave site is surrounded by an iron railing and is marked by an impressive obelisk tombstone, both erected by Sir Moses to commemorate their friendship of more than 40 years.³¹ The cemetery is no longer in use and is not tended, and the monument is almost completely hidden from view by overgrowth of foliage. The graveyard is locked, but visitors may obtain a key at the adjoining girls' school.

There was something in Hodgkin's personality which often placed him in opposition. His Quaker upbringing undoubtedly contributed to a narrow and unbalanced outlook on life which made it difficult for him to compete effectively in an imperfect world where the rules did not conform with his ethical standards. One obituary noted that, "In all matters of principle he was as unyielding as granite. He knew nothing of expediency, as separated from the highest moral considerations."³² This inflexible adherence to truth and reverence for justice worked to his disadvantage in the highly politicized environment of Guy's Hospital. Touched by disappointment and failures, Thomas Hodgkin remains one of the most fascinating and intriguing figures of mid-19th century English medicine.

SUMMARY

Thomas Hodgkin is known primarily for his description of the syndrome of enlarged lymph nodes associated with an enlarged spleen. Less well known is his report on retroversion of the valves of the aorta and his other medical and nonmedical interests. As a Quaker, Hodgkin was an active participant in the reform and humanitarian movements of his time, notably the Aborigines' Protection Society that he helped found. He supported the colonization of Africa by freed slaves, and was active in the development of settlements in Sierra Leone and Liberia. He was the first honorary secretary of the Royal Geographical Society, and made contributions to ethnology, anthropology and even foreign affairs. At home he spoke out on public health, sanitation, and improved housing and health care for the poor. He resigned from Guy's Hospital when passed over for promotion. Probably his many outside interests, especially his sympathy for the North American Indian, brought him into conflict with the hospital's treasurer, who was involved in the Hudson's Bay Company's fur trade.

ACKNOWLEDGMENT

I thank Dr. Edward H. Kass and Amalie M. Kass of Harvard Medical School for allowing me to look through their files of the microfilmed collection of the personal papers and letters of Thomas Hodgkin.

REFERENCES

1. Wilks, S.: Cases of enlargement of the lymphatic glands and spleen, (or, Hodgkin's disease,) with remarks. *Guy's Hosp. Rep.* 11:56-67, 1865.
2. Wilks, S.: Cases of lardaceous disease and some allied affections. With remarks. *Guy's Hosp. Rep.* 2:103-32, 1856.
3. Wilks, S.: Diseases, etc., of the ductless glands. I. The spleen. *Trans. Pathol. Soc. London* 10:259-63, 1859.
4. Hodgkin, T.: On some morbid appearances of the absorbent glands and spleen. *Med.-Chir. Trans. London* 17:68-114, 1832.
5. Fox, H.: Remarks on the presentation of microscopical preparations made from some of the original tissue described by Thomas Hodgkin, 1832. *Ann. Med. Hist.* 8:370-74, 1926.
6. Kaplan, H.S.: *Hodgkin's Disease*, 2nd ed. Cambridge, Mass., Harvard University Press, 1980, p. 10.
7. Dawson, P.J.: The original illustrations of Hodgkin's disease. *Arch. Int. Med.* 121:288-90, 1968.
8. Hodgkin, op. cit., p. 96.
9. Hodgkin, T. and Lister, J.J.: Notice of some microscopic observations of the blood and animal tissues. *Philos. Mag.* 2:130-38, 1827.
10. Hodgkin, T.: On retroversion of the valves of the aorta. *London Med. Gaz.* 3:433-43, 1828-29.
11. Wilks, S.: Note on the history of valvular diseases of the heart. *Guy's Hosp. Rep.* 16:209-16, 1871.
12. Wilks, S.: An account of some unpublished papers of the late Dr. Hodgkin. *Guy's Hosp. Rep.* 23:55-127, 1878.
13. *Biographical Catalogue of the Society of Friends*. 1888, pp. 355-61.
14. *Quart. J. Foreign Med. Surg.* 2:51-68, 1819-1820; *London Med. and Phys. J.* 43:164-70, 1820, p. 170 footnote; *Med.-Chir. or J. London Med. Surg. Rev.* 2:461-94, 1820, p. 494 footnote.
15. Letter from Thomas Hodgkin to John Hodgkin, Sr., January 11, 1824. From the microfilmed collection of the papers of Thomas Hodgkin, reel 2, item 209, at the Countway Library, Harvard Medical School, Boston, Mass. This reel corresponds to MSS 179 at the Friends House Library, London, England.
16. Hodgkin, T.: *Lectures on the Morbid Anatomy of the Serous and Mucous Membranes*. Vol. I. *On the Serous Membranes; and, as appended subjects, Parasitical Animals, Malignant Adventitious Structures, and the Indications Afforded by Colour*. London, Sherwood, Gilbert, and Piper, 1836, pp. 2-3.
17. Hodgkin, T.: *An Essay on Medical Education, read before the Physical Society of Guy's Hospital, at the First Meeting of the Session 1827-8*. London, Phillips, 1828, p. 6.
18. *Ibid.*, p. 7.
19. *Ibid.*, p. 20.
20. Kass, E.H., Carey, A.B. and Kass, A.M.: Thomas Hodgkin and Benjamin Harrison: crisis and promotion in academia. *Med. Hist.* 24:197-208, 1980.
21. Recollections of Hodgkin's niece Mariabella Fry. From the microfilm collection of the papers of Thomas Hodgkin, reel 10, item 73, (MSS 187).
22. Wilks, S. and Bettany, G.T.: *A Biographical History of Guy's Hospital*. London, Ward, Lock, Bowden, 1892, p. 384.
23. Letter from Thomas Hodgkin to Benjamin Harrison, Jr., September 7, 1837. From the microfilmed collection of the papers of Thomas Hodgkin, reel 8, item 51, (MSS 185).
24. Letter from Thomas Hodgkin to Thomas

- Nunneley of Leeds, August 2, 1843. From the files of the Royal College of Physicians of London.
25. Letter from J.J. Roberts to Thomas Hodgkin, May 8, 1849. From the archives of Rhodes House Library, Oxford Mss. Brit. Emp. s.18, C122/57, 122/58.
 26. Hodgkin, T.: On the practicability of civilizing aboriginal populations. *Monthly Chron.* 4:309-21, 1839.
 27. Hodgkin, T.: *Cold, Hunger, and Want of Employment; with Suggestions for their Relief*. London, Watts, 1847, p. 5.
 28. Hodgkin, T.: Remarks from Social Science Congress at Bradford, Yorkshire, 1859. *Anti-Tobacco J.* 7-8:86, 1866.
 29. Hodgkin, T.: *The Means of Promoting and Preserving Health, with additions*, 2nd ed. London, Simpkin, Marshall, 1841, pp. 175-76.
 30. *Ibid.*, p. 279.
 31. *Diaries of Sir Moses and Lady Montefiore. Comprising their Life and Work as Recorded in their Diaries from 1812 to 1883*, Loewe, L., editor. London, Griffith Farran Okeden & Welsh, 1890, Vol. 2, p. 190. Facsimile of the 1890 edition published by The Jewish Historical Society of England and The Jewish Museum. London, 1983.
 32. The late Dr. Hodgkin. *Colonial Intelligencer; or, Aborigines' Friend* 2:519-22, 1866.